

SHAKHSOV-ROV, T.S.

Calc regime of a basin in a producing layer of the Apsheron type. Dokl. AN Azerb. SSR 19 no.9:55-57 '63.

(MIRA 17:8)

T. Azerbaydzanskiy gosudarstvennyy universitet, predstavleno akademikom AN Azerb. SSR Sh.I. Mekhtiyevym.

VOZNESENSKAYA, Ye.V.; SLUGINA, Z.P.; KUTUKOVA, V.I.; YAKOBI, F.S.;
SHAKHSUVAROVA, G.V.; VASIL'YEVA, N.I.; GRYAZNOV, B.V.; ROZENSHTEYN,
M.Z.

Production of low pour-point oils from eastern paraffin-base
crudes by means of dewaxing with the aid of selective solvents.
Trudy VNII NP no.7:69-78 '58. (MIRA 12:10)
(Petroleum--Refining) (Lubrication and lubricants)

VOZNESENSKAYA, Ye.V.; KUTUKOVA, V.I.; STOYANOVICH, R.K.; SHAKHSUVAROVA,
G.V.

Use of the furfural refining process for the production of trans-
former oil from eastern sulfur-bearing crudes. Trudy VNII NP
no.7:78-86 '58. (MIRA 12:10)
(Petroleum--Refining) (Furaldehyde) (Insulating oils)

VOZNESENSKAYA, Ye.V.; SHAKHSUVAROVA, G.V.; SOCHEVKO, T.I.

Solubility of paraffins from Tuzmazy petroleum in solvents used
for dewaxing and oil removal. Trudy VNI NP no.7:339-344 '58.
(MIRA 12:10)

(Paraffins) (Solubility)

DADAYAN, G.T.; OL'KOV, P.L.; GRYAZNOV, B.V.; SHAKHSUVAROVA, G.V.;
YAKIMOVETS, N.L.; ALYUKOV, I.T.

Low temperature dewaxing of oils with the use of methyl ethyl
ketone. Khim.i tekhn.topl.i masel 6 no.6:17-21 Je '61. (MIRA 14:7)

1. Novogroznenskiy neftezavod; Vsesoyuznyy nauchno-issledovatel'skiy
institut po pererabotke nefiti i gaza i polucheniya iskusstvennogo
zhidkogo topliva i Bashkirskiy nauchno-issledovatel'skiy institut
po pererabotke nefiti.

(Petroleum--Refining)

L 12298-63

EPF(c)/EWT(m)/BDS

AFFTC/APGC

Pr-4 EW/DJ/MN
S/081/63/000/005/055/075

66

AUTHOR: Dadayan, G. T., Ol'kov, P.L., Gryaznov, B. V. and Shakhshvarova, G.V.

TITLE: The use of methylethyl ketone in the deparaffinization of oils under industrial conditions

PERIODICAL: Referativnyy zhurnal, Khimiya, no. 5, 1963, 503, abstract 5P186 (Tr. Bashkirsk. n.i in-t. po pererabotke nefti, 1962, no. 5, 130-139)

TEXT: The results of an experimental run of a set up for deparaffinizing NUNPZ using methylethyl ketone (MEK) instead of acetone for deparaffinizing MK-8 oil and transformer oil are given. It was shown that the use of MEK permits reduction of the gradient of deparaffinization from 9° C (acetone) to 4° C and increases permeability of the apparatus by 20%. In addition the actual speed of filtration significantly exceeded the planned speed. For normal operation of the refrigerant section of the apparatus, under conditions of extraction of oil with solidification temperature of -55°C, it was necessary to supply it with an ethane fraction, consisting of ≥ 95-96% ethane. There were several changes in the technical layout, aimed at increasing the possibility of taking advantage of the use of MEK. B.L.

[Abstractor's note: Complete translation]

Card 1/1

SHAKHSUVARIAN, A. V., Cand Tech Sci (diss) -- "The characteristics of strains of sherry yeasts in Uzbekistan". Moscow, 1960. 19 pp (Min Higher and Inter Spec Educ REFSR, Moscow Tech Inst of the Food Industry), 150 copies (KL, No 14, 1960, 134)

SHAKHSUVARYAN, A. V.

Characteristics of Sherry yeasts of Uzbekistan. Biokhim. vin.
no.6:79-87 '60. (MIRA 13:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut vinodeliya i
vinogradarstva "Magarach".
(Uzbekistan--Sherry) (Yeast)

KARAPETYAN, B., kand.tekhn.nauk; SHAKHSUVARYAN, L., kand.tekhn.nauk

Reducing the cost and improving the quality of earthquake-proof
building. Prom.Arm. 4 no.2: 54-57 F '61. (MIRA 14:6)

1. Armyanskiy institut stroitel'nykh materialov i sooruzheniy
Gosstrova Armyanskoy SSR.
(Armenia--Earthquakes and building)

S/774/60/001/000/006/012

AUTHOR: Shakhromanov, G. S.

TITLE: The influence surfaces of shells.

SOURCE: Akademiya nauk Gruzinskoy SSR. Vychislitel'nyy tsentr. Trudy.
v. 1. 1960, 171-180.

TEXT: The paper adduces a method and tables for the calculation of the numerical values of the deflection at characteristic points of the middle surface of a spherical shell having a rectangular planform, when the shell is exposed to the action of concentrated forces applied in a finite number of internal points, and the edge of the shell is radially supported. The numerical calculation is performed according to B. G. Galerkin's well-known method. The tables adduced can be utilized for the approximate calculation of a shell with respect to an external load of arbitrary type, if the latter is replaced by a finite aggregate of concentrated forces applied at separate points of the shell surface. The simplified calculation method for three-dimensional shell-type structures thus set forth is termed by the author "the calculation method of the so-called influence surface" by analogy with the one-dimensional case. There are 3 figures, 4 tables, and 1 Russian-language Soviet reference: Vlasov, V. Z., Obshchaya teoriya obolochek i yeye prilozheniye

Card 1/2

The influence surfaces of shells.

S/774/60/001/000/006/012

v tekhnike (The general theory of shells and its application in engineering)."
Gostekhizdat, Moscow-Leningrad, 1949).

SUBMITTED: 25 November 1958.

Card 2/2

PERCHENKO, A.A., kand.tekhn.nauk; MARCHENKO, M.A., inzh.; SHAKHROVA, N.P., inzh.

More on the problem of synthesis of catalysts for oxidation
of paraffin wax by air. Masl.-zhir.prom. 28 no.7:25-27
Jl '62. (MIRA 15:11)

1. Nauchno-issledovatel'skiy institut sinteticheskikh
zhirozameniteley i moyushchikh sredstv.
(Paraffin wax) (Oxidation) (Catalysts)

PERCHENKO, A.A., kand. tekhn. nauk; MARCHENKO, M.A., inzh.;
UDOVENKO, S.A., inzh.; SHAKHROVA, N.P., inzh.

Thermal processing of residual acids after preliminary saponi-
fication. Masl.-zhir. prom. 29 no.3:23-25 Mr '63.
(MIRA 16:4)

1. VNIISINZh.

(Acids, Fatty)

KASPEROVICH, Ye.Ye.; SHAKHROVA, N.F.; GETMANSKIY, I.K.

Methods for the design and calculation of an experimental spray-drying system for the production of detergents. Trudy NII ZHIMSa no. 2:93-104 '62. (MIRA 16:12)

PERCHENKO, A.A., kand.tekhn.nauk; UDOVENKO, S.A., inzh.; MARCHENKO, M.A.,
inzh.; SHAKHROVA, N.P., inzh.

Thermal refining of synthetic fatty acids. Masl.-zhir.prom. 29
no.9:16-18 S '63. (MIRA 16:10)

1. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut
sinteticheskikh zhirozameniteley.

TSERETELI, Savle Benediktovich; SHAKHSEVANIDZE, G., redaktor

[The nature of the laws of science] O prirode zakonov nauki. Tbilisi,
Gosizdat Gruzinskoi SSR, 1956. 153 p. [in Georgian] (MIRA 9:12)
(Science)

ASKERKHANOV, R.P., prof.; SHAKENHAYEV, M.B.I.

Characteristics of the clinical picture and treatment of stab
and incision wounds of the chest. Zhurnal no.1:47-55 '63.
(MIRA 17:5)

1. Iz kliniki fakul'tetskoy khirurgii (zav. - zaslushennyy
deyatel' nauk Dagestanskoy ASSR prof. R.P. Askarkhanov)
Dagestanskogo meditsinskogo instituta.

DEVELOPMENT, 1961; GILKIN, 1961; GILKIN, 1961; GILKIN, 1961; GILKIN, 1961.

Using methylmercury to study the demerit of glass under plant con-
ditions. Study Based on 1961-1962.

(MIRA 17-10)

SHAKHS V. V., L. A.

"Investigation of Lining Seams Under Dynamic Loads." Cand
Tech Sci, Yerevan Polytechnic Inst named K. Marx, Min Higher
Education USSR, Yerevan, 1954. (KL, No 10, Mar 55)

SC: Sur. No. 670, 29 Sep 55-Survey of Scientific and Technical
Dissertations Defended at USSR Higher Educational Institutions (15)

KARAPETYAN, B.K.; SHAKHSUVARYAN, L.V.

Results of an engineering study of the Byurakan earthquake. Izv. AN Arm.
SSR. Ser. FMET nauk 7 no.5:91-95 S-O '54. (MIRA 8:7)

1. Institut stroitel'nykh materialov i sooruzheniy Akademii nauk
Armyanskoy SSR. (Byurakan--Earthquakes and building)

SHAKHSUVARYAN, L.V.

Analyzing the performance of floor beam joints for seismic loads.
Izv. AN Arm. SSR. Ser. tekhn. nauk 10 no.5:45-54 '57. (MIRA 11:1)

1. Institut stroitel'nykh materialov i sooruzheniy AN ArmSSR.
(Girders) (Earthquakes and building)

SHAKHSUVARYAN, L.V.

New method for making large composite blocks. Izv.AN Arm.SSR.Ser.tekh.
nauk 11 no.6:73-76 ' 58. (MIRA 12:3)

1. Institut stroymaterialov i sooruzheniy Ministerstva stroitel'stva
Arm.SSR.

(Masonry)

SHAKHSUVARYAN, L.V.

"Tuffs and marbles in Armenia" by Z.A.Atsagortsian, O.A.Martirosian.
Reviewed by L.V.Shakhsuvarian. Izv.AN Arm.SSR. Ser.tekh.nauk no.5:
65-67 '60. (MIRA 13:11)

(Armenia--Volcanic ash, tuff, etc.)

(Armenia--Marble)

(Atsagortsian, Z.A.)

(Martirosian, O.A.)

S/173/60/013/004/003/003
D203/D301

AUTHOR: Shakhshuvaryan, L.V.

TITLE: Dynamic testing of joints

PERIODICAL: Akademiya nauk Armyanskoy SSR. Seriya tekhnicheskikh nauk. Izvestiya, v. 13, no. 4, 1960, 55 - 61

TEXT: The article examines the behavior of certain joints of inter-storey reinforced concrete precast floors under dynamic loading. Similar joints in floors in seismic tremors withstand in addition to displacing loads, also tension and compression forces. The joints chosen for the dynamic loading were of a splined type; In one case reinforcement, tying two cross-members, was introduced, while in the other case binding reinforcement of hollow planks was used. The properties of the members are given in tabulated form. In order to determine the comparative strength of these joints before subjecting them to dynamic loading, two specimens of given joints were tested for

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S/173/60/013/004/003/003
D203/D301

Dynamic testing of joints

static loads. The results indicate that the reinforced joints have 25 - 31% greater strength than mortar joints. Dynamic testing of the above-mentioned joints for the load-reversals of tension and compression was performed on a dynamic machine A.I.S. When the joints were tested for dynamic loading, set up by flexible springing resistance, the element of impact acted then during the load reversal. The measurements of tension and compressive forces were obtained on resistance tensiometers mounted on a flat spring dynamometer of the dynamic testing machine. The magnitude of forces were given by an oscillogram. Two specimens of each type of joint were tested for the dynamic loading. The results given indicate that reinforced joints show even greater strength under dynamic loading than under static, compared with mortar joints, namely, 25 - 57%. By comparing the same joint it was shown that all the above mentioned joints indicate a 8 - 43% higher strength than under the action of static loading. The results of the above exper-

Card 2/3

SHAKHSUVARYAN, L. V.

Dynamic testing of butt joints. Izv. AN Arm. SSR. Ser. nauk 13
no. 4:55-62 '60. (MIRA 13:11)
(Reinforced concrete construction)

SHAKHSUYARYAN, L.V.; PIRUZYAN, S.A.; PESHTMALDZHYAN, O.V.

Engineering investigation of the Bogdanovka (Madatapa Lake)
earthquake of December 8-9, 1959. Izv. AN Arm. SSR. Ser. tekhn.
nauk 14 no. 1:55-66 '61. (MIRA 14:3)

1. Institut stroymaterialov i sooruzheniy Gosstroya Armyanskoy
SSR.

(Bogdanovka (Georgia)—Earthquake, 1959)

SHAKHSUVARYAN, L.V.

Method of erecting the precast shaft of reinforced concrete silo.
Trudy Arm. inst. stroimat. i soor. no.1:67-75 '59. (MIRA 14:12)
(Silos)
(Armenia--Precast concrete construction)

SHAKHSUVARYAN, L.V.; ZAKHARYAN, Zh.V.

Durability and deformability of a single-layer masonry
of tuff stones with regular shape. Izv.AN Arm.SSR.Ser.tekh.
nauk 15 no.5:67-76 '62. (MIRA 15:12)
(Volcanic ash, tuff, etc.)
(Masonry)

SHAKHSUVARYAN, L.; GUKASYAN, V.; MINASYAN, R.

- Deteriorations in stone structures of industrial and public buildings and causes of their formation. Prom.Arm. 6 no.12:44-48 D '63. (MIRA 17:2)

SHAKHTADZHYAN, A.L., redaktor; KAPLANYAN, M.A., tekhnicheskiiy redaktor

[Flora of Armenia] Flora Armenii. Erevan, Izd-vo Akademii nauk
Armianskoi SSR. Vol.2. Portulacaceae-Plumbaginaceae. Pod red.
A.L.Shakhtadzhiana. 1956. 519 p. (MLRA 9:12)
(Armenia--Botany)

KASIMOV, G.B.; POPOVA, T.I.; SHAKHTAKHTINSKAYA, E.M.

Helminthological dissertations. Trudy Gel'm.lab. 8:278-286 '56.
(MLRA 9:8)
(Parasites--Birds) (Worms, Intestinal and parasitic)

NEGREYEV, V.F.; ZNAYCHENKO, S.G.; GARAYEV, Z.Sh.; SHAKHTAKHTINSKAYA, G.P.

Protecting the supports of offshore structures from corrosion in
the petroleum industry. Trudy Gipromornefti no.1:144-171 '54.
(Protective coatings)

TRIFEL', M.S.; SHAKHTAKHTINSKAYA, G.G.; FARKHADOV, A.A.

Interaction of cathodic protection and cement coatings. Trudy
Gipromornefti no.1:250-259 '54. (MLRA 9:12)
(Electrolytic corrosion) (Protective coatings)

ACCESSION NR: AP4042950

S/0249/64/020/004/0039/0043

AUTHOR: Shakhtakhtinskiy, G. B.; Dzhabarov, E. A.; Shkarov, G. A.

TITLE: Selection of a method of gallium extraction in the process of multipurpose treatment of alunite

SOURCE: AN AzerbSSR. Doklady*, v. 20, no. 4, 1964, 39-43

TOPIC TAGS: gallium extraction, alunite treatment, bauxite treatment, alumina production, Bayer process, fractional carbonation method, electrolytic method

ABSTRACT: Methods are reviewed for gallium extraction from alkaline aluminate solutions recycled in the processes of alunite treatment. The fractional carbonation method and electrolysis with a mercury cathode (the Breteque method) are described briefly, since these methods are used for gallium extraction in the process of bauxite treatment for the production of alumina. Application of the first method for gallium extraction in the new alumina production setup

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ACCESSION NR: AP4042950

from alunite is ruled out, since the Bayer process with centrifuging was adopted for recovering the alumina; in this case, the application of fractional carbonation would diminish the quantity of recycled alkaline solution and would cause a great loss in gallium. Applicability of the electrolytic method was studied experimentally using synthetic solutions containing, in addition to Al_2O_3 and Na_2O , varied amounts of potassium and/or sodium sulfates and about 0.3 g/l gallium. The plots of gallium concentration versus time of electrolysis show that SO_4^{2-} concentration has no appreciable effect on the gallium output, which remained relatively high (8—11%) even in solutions saturated with sulfates. Therefore, electrolysis with a mercury cathode is recommended for gallium extraction from alkaline aluminate solutions obtained in the process of the multipurpose treatment of aluminates. Orig. art. has: 1 figure.

ASSOCIATION: Institut khimii AzerbSSR (Institute of Chemistry, AzerbSSR)

SUBMITTED: 16Oct63

ATD PRESS: 3086

ENCL: 00

SUB CODE: IC, GC

NO REF SOV: 006

OTHER: 003

Card 2/2

L 16697-65 EPA(s)-2/EWT(m)/EWP(t)/EWP(b) Pt-10 IJP(c)/ESD(gs)/SSD/
AFWL/ASD(a)-5/AS(mp)-2/AFETR RDW/JD/JG

ACCESSION NR: AR5000800

S/0058/64/000/010/E052/E052 6

SOURCE: Ref. zh. Fizika, Abs. 10E415

AUTHORS: Abdullayev, G. B.; Movlanov, Sh.; Shakhtakhtinskiy, M. G.; Kuliyev, A. A.

TITLE: Investigation of the solubility of selenium and mercury in solid tellurium and their influence on the electric properties of tellurium

CITED SOURCE: Izv. AN TadzhSSR. Otd. geol. -khim. i tekhn. n., no. 2(11), 1963, 13-22

TOPIC TAGS: tellurium, alloying, solubility, electric conductivity, Hall constant, carrier mobility

TRANSLATION: The solubility of Se in solid Te was determined by the diffusion method in the interval 320--440C; with decreasing temperature, the solubility increases first linearly and then more slowly, reaching 0.1 (atomic fraction) of the Se in the solution at 580K. The solubility in Te first increases with increasing temperature, reaches a

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L 16697-65

ACCESSION NR: AR5000800

maximum at 370C ($4 \times 10^{20} \text{ cm}^{-3}$), and then drops to 10^{20} cm^{-3} at 440C. The electric conductivity (σ) and the Hall constant of samples of pure Te and Te-Se and Te-Hg alloys were measured as functions of the temperature (from -190 to 170C) and composition in the interval of Se and Hg concentrations (K_{Se} and K_{Hg}) of 0 -- 1 wt.%. As K_{Se} is increased to 0.2 wt.%, the values of σ and of the hole mobility u_p in the samples increase to $68 \text{ ohm}^{-1} \text{ cm}^{-1}$ and $3,630 \text{ cm}^2/\text{V-sec}$, respectively, and then decrease to $0.44 \text{ ohm}^{-1} \text{ cm}^{-1}$ and $240 \text{ cm}^2/\text{V-sec}$ ($K_{\text{Se}} = 1 \text{ wt.}\%$), respectively. At considerable values of K_{Hg} , the σ of the alloys increases, reaching $7.5 \text{ ohm}^{-1} \text{ cm}^{-1}$ at $K_{\text{Hg}} = 1 \text{ wt.}\%$. For low $K_{\text{Hg}} = 10^{-3} \text{ -- } 5 \times 10^{-3} \text{ wt.}\%$, the σ of the samples is close to that of pure Te. When K_{Hg} increases to 10.%, u_p first decreases monotonically (from $980 \text{ cm}^2/\text{V-sec}$) and then increases, reaching a maximum ($580 \text{ cm}^2/\text{V-sec}$) at $K_{\text{Hg}} = 0.1 \text{ wt.}\%$ (all the data are for a temperature of 77). At higher temperatures, the laws governing the variation of the electric properties of the alloys are in general analogous. A. Zhdan.

SUB CODE: SS, EM

ENCL: 00

Card 2/2

SHAKHTAKHTINSKIY, T. A.

Effect of a lumbar sympathectomy on capillary circulation in
endarteritis obliterans; some comparative data from studying
circulation by means of radioindication and oscillography.
Zdrav. Tadzh. 9 no.2:40-44 Mr-Apr '62. (MIRA 15:7)

1. Iz fakul'tetskoy khirurgicheskoy kliniki (zav. - dotsent
Z. P. Khodzhayev) Dushanbinskogo meditsinskogo instituta imeni
Abuali ibni Sino i 2-go khirurgicheskogo otdeleniya (zav. Ye. K.
Didkovskaya) Respublikanskoy klinicheskoy bol'nitsy TadzhSSR.

(ARTERIES---DISEASES)
(NERVOUS SYSTEM, SYMPATHETIC---SURGERY)
(OSCILLOGRAPHY) (RADIOTRACERS)

SHAKHTAKHTINSKIY, T.N.; SHIK, G.L.

Development of the method of chromatographic analysis of the
products of ethylene chlorination. Azerb.khim.zhur. no.6:
65-68 '63. (MIRA 17:3)

SHAKHTAKHTINSKAYA, Z.

Shakhtakhtinskaya, Z. "A new bird trematode -- Pegosomum skrjabini n. sp.", Trudy Gel'mintol. laboratorii (Akad. nauk SSSR), Vol. II, 1949, p. 87-90.

SO: U-4630, 16 Sept. 53, (Letopis 'Zhurnal 'nykh Statey, No. 23, 1949).

SHAKOTAKHITSKAYA, Z.

Nematoda

New nematode *Petroviprocta vigissi* nov. gen. nov. sp. from the thoracic cavity of *Nycticorax nycticorax*. Trudy Gel'm, lab. no. 5, 1951.

9. Monthly List of Russian Accessions, Library of Congress, September 1952, UNCL.

SHAKHMAZOV, A. .

"Helminthofauna of Poultry and Commercially Hunted Aquatic Birds of the Azerbaijan SSR." Dr Biol Sci, Azerbaijan State U, Baku, 1953. (RZhBiol, No 1, Ser 54)

SC: Ser. 432, 29 Mar 55

SHAKHTAKHTINSKAYA, Z.M.

Two new species of nematodes of birds of Azerbaijan [in Azerbaijani
with summary in Russian]. Dokl.AN Azerb.SSR 12 no.1:37-41 '56.
(Azerbaijan--Nematoda) (Parasites--Birds) (MIRA 9:7)

SHAKHTAKHTINSKAYA, Z.M.

Echinochasmus (Episthmium) mathevossiani nov. sp., a new trematode
from birds of Azerbaijan. Dokl. AN Azerb. SSR 14 no.2:155-157
'58. (MIRA 11:4)

1. Azerbaydzhanskiy pedagogicheskiy institut. Predstavleno akademikom
AN AzerSSR A.I. Karavayevym.
(Azerbaijan--Trematoda)
(Parasites--Birds)

SHAKHTAKHTINSKAYA, Z.M.

New cestode from birds in Azerbaijan. Dokl. AN Azerb. SSR 16
no. 5:507-509 '60. (MIRA 13:8)

1. Azerbaydzanskiy gosudarstvennyy pedagogicheskiy institut im.
V.I. Lenina. Predstavleno akad. AN AzerSSR A.I. Karayevym.
(Parasites--Birds) (Tapeworms)

1ST AND 2ND CATEGORIES																										3RD AND 4TH CATEGORIES																									
PROCESSES AND PROPERTIES INDEX																										MATERIALS INDEX																									
7 <i>cf</i> Arsenate method of iodometric determination of copper. G. B. Shakhmatkin and T. D. Efendiev. <i>Zhur. Anal. Khim.</i> 3, 248-9 (1948).—By analogy with Mg and Zn the reaction between Cu and AsO_4^{3-} can be expected to proceed according to: $3Cu^{++} + 2AsO_4^{3-} = Cu_3(AsO_4)_2 + 3H_2SO_4$; $Cu_3(AsO_4)_2 + 3H_2SO_4 = 3H_2AsO_4 + 3CuSO_4$; $H_2AsO_4 + 2KI + H_2SO_4 = K_2SO_4 + H_2AsO_4 + H_2O + 2I$; $2CuSO_4 + 4KI = CuI_2 + 2K_2SO_4 + 2I$. Thus, one mol. of $Cu_3(AsO_4)_2$ liberates 7 atoms of I which can be titrated with thiosulfate. It is reasonable to expect the arsenate method to be 2 times more accurate than the ordinary iodometric method. Acidify a soln. which is not over 0.05 N with respect to Cu with H_2SO_4 and add $(NH_4)_2AsO_4$ to make it 0.15 N. Bring to a boil and induce pptn. by adding NH_4OH dropwise to a faint odor. Bring to boil to remove excess NH_3 and filter hot through a glass filter. Wash filter with hot H_2O. Dissolve ppt. in 25 ml. of H_2SO_4 added in 6-8 aliquots, taking care each time to spread the acid over the ppt. and wait until the acid goes through before each new addn. Add an equal vol. of $CHCl_3$ or C_6H_6, then 3 ml. of 3 N KI and shake for several sec. to collect the liberated I into the solvent layer. Add approx. 30 ml. of H_2O and titrate with 0.01 N $Na_2S_2O_3$. One ml. of 0.01 N $Na_2S_2O_3$ = 0.2724 mg. Cu. M. Hosh.																																																			
ASB-51A METALLURGICAL LITERATURE CLASSIFICATION																																																			

MARKHAKHATSKII, T. I. I. 1949, 1.

24269

Iodobetrichyeskoye opredelyeniye vandiya s primenyeniyem rastvurityel'eyioda.
Trudy Inta khimii (Akad. Nauk. Azerbaidzh. SSR) T. VII, 1949 S. 120-27-
Ryevnye na azerbaidzh. Yaz.

1. Tselogo-geografichyekiye nauki (Palyeontologiya - Sm. XV, S. H. A.
Tselo-o-Geografichyekiye nauki V Tselom. Tselogiy. Pyetrografkya.
Mineralogiya. Kristallografiya.

SO: SETOPIS NO. 34

SHAKHTAKHTINSKIY, G.B.

"The Arsenate Method of Iodometry." Thesis for degree of Dr. Chemical Sci. Sub 9, Feb 49, Moscow Order of Lenin State U imeni M.V. Lomonosov.

Summary 82, 18 Dec 52, Dissertations Presented For Degrees in Science and Engineering in Moscow in 1949. From Vechernyaya Moskva, Jan-Dec 1949.

SHAKHTAKHTINSKIY, G. B.

27 7 37 5
 ✓ Arsenate method of iodometric determination of lead by
 use of organic solvents. G. B. Shakhmatovskii and R. A.
 Melikova. Trudy Akad. Nauk. Inst. im. M. A. Lazavskaya 1954, No. 8, 80-7. — A study in which the feasi-
 bility of the quant. conversion of a $PbAsO_4$ ppt. to $PbSO_4$
 ppt. was considered. $PbAsO_4$ was quantitatively converted
 to $PbSO_4$. Pptn. of $PbAsO_4$ in a slightly acid medium was
 found to be feasible. Then a series of expts. was carried out

in an $AcOH$ medium. This medium formed favorable con-
 ditions for obtaining crystn. ppts. The next series of expts.
 was made to det. the quant. of excess precipitant necessary
 for pptn. under specified conditions. Then a series of expts.
 was made to study the effect of acidity of medium on results
 of the detns. Gladys S. Macie

DM
 MT
 fa

SHAKHTAKHTINSKIY, G. B.

27
Iodometric determination of copper via the basic arsenate.
G. B. Shakhhtakhtinskiy and R. A. Melnikova
Azerbaijan. Ind. Test. Im. M. Akhmedov 1974
88-02 — Studies have shown that the compn. of Cu arsenate ppt. depended on the arsenate ion concn. Obtaining a crystn. ppt. of definite compn. also depended on concn. of acetate ions, concn. of ammonia soln. used for neutralization, and on other conditions. The effect of the NH_3 concn. was studied, and for this a c.p. soln. of CuSO_4 was prepd. Reproducible results were obtained with the use of 2.5% soln. of NH_3 . In more concd. solns. of NH_3 , the ppt. dissolved. The ppt. had a azure color. For further expts. a 0.01M soln. of CuNO_3 was prepd. The effect of varying the quantity of HOAc in soln. was studied. A series of expts. was also made to define the moment of neutralization by NH_3 . The following procedure for iodometric detn. of Cu via the basic arsenate is recommended: 0.01-0.02M soln. of bivalent Cu is dild. 5 times with water, acidified with HOAc avoiding an excess, and 1.5 times excess of 0.12-0.15N soln. of Na_2AsO_4 added. The mixt. is then heated almost to boiling. With stirring, a soln. of NH_3 is added dropwise until cessation of the odor of HOAc . Bromocresol purple is added as an indicator. The soln. is boiled for 2-3 min. and, after standing 20 min., is filtered. It is decanted 4 times and washed with hot water until there is a neg. reaction for AsO_4 ion. The ppt. is dissolved in H_2SO_4 soln. and titrated iodometrically. For this, benzene and KI soln. are added, the soln. is shaken 20-30 sec., dild. with water, and titrated with $\text{Na}_2\text{S}_2\text{O}_3$ soln. G. S. M.

PM 1/2

SHAKHTAKHTINSKIY, G. B.

USSR/ Chemistry - Analytical

Card 1/1 : Pub. 145 - 10/14

Authors : Shakhtakhtinskiy, G. B.

Title : Iodometric determination of arsenic acid by means of organic solvents

Periodical : Zhur. anal. khim. 9/4, 233-238, Jul-Aug 1954

Abstract : A macro- and micro method for direct and accurate iodometric determination of arsenic acid, with the aid of organic solvents, is described. The method is based on the displacement of the equilibrium reaction from left to right and the extraction of the forming iodine (I₂) by organic solvents. Results obtained with the new method are described. Ten references: 7-German; 2-USA and 1-USSR (1900-1936). Tables.

Institution : The M. Azizbekov Azerbaidzhan Industrial Institute, Baku

Submitted : June 21, 1952

USSR/Analytical Chemistry - Analysis of Inorganic Substances, G-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61843

Author: Shakhtakhtinskiy, G. B., Turchinskiy, M. L.

Institution: None

Title: Arsenate Method of Iodometric Determination of Nickel

Original

Periodical: Tr. Azerb. industr. in-ta, 1955, No 11, 64-69

Abstract: In the analysis of Fe-Ni alloys Ni is precipitated as $\text{Ni}_6(\text{NH}_4)_3(\text{AsO}_4)_5$ and determined by iodometric titration of AsO_4^{3-} after dissolution of the precipitate in H_2SO_4 . Fe is first removed by precipitation with H_3AsO_4 in 4-5% CH_3COOH ; one g alloy dissolved with heating in concentrated HCl, evaporated almost to dryness with 2 ml concentrated HNO_3 , residue dissolved in water and diluted to 100 ml. To aliquot portion of solution added 50 ml water, 2 ml 1 N $\text{CH}_3\text{COONH}_4$ and CH_3COOH to a concentration of 4-5% (total volume 150 ml). Heated to 40-50°, added 3-4 fold excess warm H_3AsO_4 , boiled 10 minutes and filtered immediately through No 3 or 4 crucible. Precipitate of Fe arsenate

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USSR/Analytical Chemistry - Analysis of Inorganic Substances, G-2

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 61843

Abstract: washed 10 times with 3% CH_3COOH . Filtrate and washings evaporated to dryness, residue treated with concentrated NH_4OH , added 10 ml 0.5 N H_3AsO_4 , 5 ml 1 N $\text{CH}_3\text{COONH}_4$, excess of 15% solution NH_4OH (until precipitate is dissolved), diluted to 50-60 ml, boiled 8-10 minutes, added 25 ml alcohol and filtered after 5 minutes through No 3 or 4 crucible. Precipitate of $\text{Ni}_6(\text{NH}_4)_3(\text{AsO}_4)_5$ washed 10 times with warm water-alcohol mixture (1:2) to which had been added 2-3 drops NH_4OH , and dissolved in 25 ml H_2SO_4 (1:2.5). To the solution added 20-25 ml C_6H_6 or CHCl_3 , 3 ml 1 N KJ , shaken for several seconds, added 25-30 ml water and the liberated J_2 titrated with 1 N $\text{Na}_2\text{S}_2\text{O}_3$ until the organic layer is decolorized. One ml 0.1 N $\text{Na}_2\text{S}_2\text{O}_3$ is equivalent to 0.00352 g Ni . Error 0.08% Ni .

Card 2/2

SHAKHTAKH TINSKIY, G-B.

Arsenate method of iodometric determination of cobalt
G. B. Shakhmatovskiy and M. L. Turchinskii. *Trudy
Azerskikh. Inst. im. M. Azadshvili* 1955, No. 11,
70-8 (in Russian). -- Co is detd. in Co salts or in Co-Fe

alloys by pptg. $\text{Co}(\text{NH}_4)_2(\text{AsO}_4)_2$ and titrating the arse-
nate in the ppt. iodometrically. In the presence of Fe, the
Fe is 1st sepd. as FeAsO_4 in a solu. acidic enough to keep Co
in solu. Co-Fe turnings, 1 g., are dissolved in a min. of
warm concd. HCl, oxidized with 1-2 ml. concd. HNO_3 ,
evapd. to dryness, dissolved in H_2O , transferred to a 100-
ml. volumetric flask, and dild. to vol. An aliquot contg.
approx. 0.05 mole Co/l. is neutralized with NH_4OH to the
1st permanent turbidity, treated with 2.0 ml. N.
dild. to 50-60 ml. with H_2O , and treated with 160
 NH_4OAc and sufficient AcOH to provide 4-5% AcOH in 160
ml. of this solu. The mixt. is heated, treated with a 3- to
8-fold excess of warm H_2AsO_4 , boiled 5-10 min., and filtered
immediately through a Schott No. 3 or 4 filter with suction.
The ppt. is washed 10 times with hot 3% AcOH . The fil-
trate and washings are evapd. in a 250-ml. beaker until rose
crystals 1st appear, treated with 3-5 ml. 0.5N H_2AsO_4 , dild.
to 60 ml. with H_2O , heated to boiling, neutralized dropwise
(from a buret) with NH_4OH until an NH_3 odor persists,
treated with 40 ml. EtOH , stirred, covered, and set aside
for 5 min. The mixt. is filtered through a covered, usual
filter without decantation or suction. The ppt. is washed

SAKHOTARHTANSKII CB. TURCHNSKII

5 times with EtOH-H₂O (1:2) and 5 times with hot H₂O. H₂SO₄ (25 ml.) is used to wash the walls of the pptn. beaker and transferred in small amts. to the filter. The H₂SO₄ filtrate, collected in a clean flask, is treated with 25-40 ml. C₆H₆ and 3.0 ml. N KI, shaken, dild. with 25 ml. H₂O, and titrated with 0.1 N Na₂S₂O₃ until decolorization of the C₆H₆. One ml. Na₂S₂O₃ = 3.56 mg. Co. The aq. layer remains rose color due to Co. In Co-Fe alloys contg. 1-20% Co the relative error was 0.8-0.1%, resp. Co also was accurately detd. in Co salts by adding a known amt. of H₂AsO₄ and detg. the excess H₂AsO₄. Similar results were obtained by the volumetric K cobaltinitrite method. R. M.

4
2/1 (4E4's)

PM
MT

15-1957-10-14149
Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 10,
p 125 (USSR)

AUTHORS: Shakhtakhtinskiy, G. R., Aslanov, G. A.

TITLE: The Arsenate Method of Iodometric Determination of Calcium (Arsenatnyy metod yodometricheskogo opredeleniya kal'tsiya)

PERIODICAL: Tr. Azerb. industr. in-ta, 1956, Vol 15, pp 103-110

ABSTRACT: A new iodometric method of determining Ca is presented. The essentials of the method are summarized here. To the solution to be tested, which is subacidic to weakly acidic, add 20 ml of 1-normal solution of sodium arsenate and 1 to 2 g of NH_4Cl , and dilute with distilled water to approximately 100 ml. Then precipitation is produced by adding cold concentrated ammonia solution drop by drop, constantly stirring with a glass rod. After precipitation has ceased, an excess of concentrated ammonia solution is added, one third the volume of the test solution. After about five minutes, the sediment

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SHAKHTAKHTINSKIY, G. B.

137-58-3-6291

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 3, p 265 (USSR)

AUTHORS: Shakhtakhtinskiy, G. B., Mukimov, A. M.

TITLE: Determination of Titanium by an Iodometry Method Involving As
(Arsenatnyy metod yodometricheskogo opredeleniya titana)

PERIODICAL: Dokl. AN AzerbSSR, 1957, Vol 13, Nr 6, pp 629-632

ABSTRACT: A 10 percent solution of NH_4OH is added with agitation to an acid solution of Ti (to which some methyl orange has been added previously) until a yellow color is obtained; no attention is paid to the formation of precipitates in the process. 3 cc of H_2SO_4 (1:2.5) are added, the solution is lightly heated to dissolve the precipitate, water is added to a total volume of 50 cc, and the mixture is heated again to a temperature of 70-80°. A solution of a precipitating agent is added in one batch to the heated Ti solution (1-2 drops of methyl orange are added to 25-30 cc of an 0.5 N Na_3AsO_4 solution; H_2SO_4 (1:2.5) is then added by drops until a faint orange tint is obtained, at which point the solution is diluted with water to a volume of 50 cc and heated to a temperature of 70-80°). After adding 3 cc of 4 N $\text{CH}_3\text{COONH}_4$ solution,

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SHAKHTAKHTINSKIY, G.B.

137-58-5-11211

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 5, p 330 (USSR)

AUTHORS: Shakhtakhtinskiy, G. B., Mukimov, A. M.

TITLE: The Arsenate Method of Iodometric Determination of Titanium
in the Presence of Aluminum (Arsenatnyy metod iodometri-
cheskogo opredeleniya titana v prisutstvii alyuminiya)

PERIODICAL: Tr. Azerb. industr. in-ta, 1957, Nr 16, pp 86-93 (Summary in Azerbaijani)

ABSTRACT: Bibliographic entry. Ref. RzhMet, 1958, Nr 3, abstract
6291

1. Aluminum--Analysis 2. Titanium--Determination 3. Arsenates
--Applications

Card 1/1

SOV/137-58-8-18174

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 8, p 281 (USSR)

AUTHORS: Shakhtakhtinskiy, G. B., Mukimov, A. M.

TITLE: The Arsenate Method for the Iodometric Determination of Titanium in the Presence of Cations of the First and Second Analytical Groups (Arsenatnyy metod yodometricheskogo opredeleniya titana v prisutstvi kationov 1-y i 2-y analiticheskikh grupp)

PERIODICAL: Tr. Azerb. industr. in-ta, 1957, Nr 17, pp 108-115

ABSTRACT: A new iodometric method for the determination of Ti in the presence of alkaline-earth metals and Mg was developed. To the solution containing Ti are added to methyl orange end point: A 10% solution of NH_4OH , 3 cc H_2SO_4 (1:2.5), and 50 cc of water, and the whole is heated to 70-80°C. For the precipitation 25 - 30 cc of 0.5N solution of Na arsenate is taken, 1 - 2 drops of methyl orange are added, then dropwise the H_2SO_4 (1:2.5) is added until the color of the indicator changes to a weak orange. The solution is diluted to 50 cc with water and heated to 70 - 80° after which all of the precipitator is added to the Ti solution. Then 3 cc of 4N solution of $\text{CH}_3\text{COONH}_4$ is

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SOV/137-58-8-18174

The Arsenate Method for the Iodometric (cont.)

added and, after three min, the mixture is filtered through a fritted glass filter Nr 4. The precipitate is washed 5 - 7 times with a hot 2% NH_4Cl solution and then dissolved in 20 - 25 cc of H_2SO_4 (1:2.5). To the solution are added: 20 - 25 cc of benzene or chloroform and 4 cc of 3N solution of KI. The iodine extracted with the organic solvents is titrated with 0.1N solution of Na thiosulfate

Z. G.

1. Titanium alloys--Titration
2. Chromium--Determination
3. Manganese--Determination
4. Vanadium--Determination

Card 2/2

SOV/137-58-7-16142

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 7, p 316 (USSR)

AUTHORS: Shakhtakhtinskiy, G. B., Mamedov, I. A.

TITLE: Iodometric Determination of Aluminum With the Aid of a Basic Arsenate (Iodometricheskoye opredeleniye alyuminiya cherez osnoinuyu mysh'yakovokisluyu sol')

PERIODICAL: Tr. Azerb. industr. in-ta, 1957, Nr 19, pp 273-279

ABSTRACT: The method of iodometric determination of Al through the formation of the $Al_5(OH)_3(AsO_4)_4$ salt is proposed. The method is notable for its high precision and is completed within 30 - 40 min. To 10 cc of the heated solution containing Al 1 - 1.5 g NH_4Cl and NH_4OH solution are added until the appearance of a light turbidity, which is dissolved with 1 - 2 drops of concentrated HCl. 3 cc of 50% CH_3COOH and 2 cc of 2-N NH_4COOCH_3 solution are added, heating to the commencement of boiling. 6 - 10 cc of 0.5-N slightly acid acetate solution of Na arsenate is placed in a separate flask, diluted with water to 15 cc, and heated to boiling. This precipitator solution is added to the hot test-sample solution. the mixture is heated and boiled for 3 - 5 min, filtered through a Nr 3 or Nr 4 glass filter,

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SOV/137-58-7-16142

Iodometric Determination of Aluminum (cont.)

washed 6 - 7 times with 5 - 10 cc hot 2% NH_4Cl [should be NH_4Cl ; Transl. Ed. Note] solution, the precipitate is dissolved on the filter with 25 - 30 cc H_2SO_4 (1:2.5) solution, and the filter is washed 5 - 6 times with water. 20 - 25 cc of benzene or chloroform and 3 cc of freshly prepared 2-N KI solution are added to the solution. The whole is shaken for the greatest possible extraction of the liberated I with the solvent layer, diluted with water, and carefully titrated with 0.1-N solution of Na thiosulfate to the discoloration of the solvent layer. 1 cc of 0.1-N $\text{Na}_2\text{S}_2\text{O}_8$ [more logically $\text{Na}_2\text{S}_2\text{O}_3$; Transl. Ed. Note] corresponds to 0.00168 g Al or 0.00318 g Al_2O_3 .

A.M.

1. Aluminum--Determination
2. Iodine--Applications

Card 2/2

SHAKHTAKHTINSKIY, G.B.; MAMEDOV, I.A.

Arsenate method for the iodometric determination of aluminum
and iron present simultaneously. Azerb.khim.zhur. no.1:
45-51 '59. (MIRA 13:6)
(Aluminum--Analysis) (Iron--Analysis) (Iodometry)

SHAKHTAZHTINSKIY, G.B.; MUKIMOV, A.M.

Arsenate method for the iodometric determination of titanium in the presence of cations of the ammonium sulfide group (with the exception of iron and aluminum). Izv. AN Azerb. SSR. Ser. fiz.-tekh. i khim. nauk no.1:97-102 '59. (MIRA 12:6)

(Titanium--Analysis) (Iodometry)

SHAKHTAKHTINSKIY, G.B.; MAMEDOV, I.A.

Arsenate method for determining thorium iodometrically.
Azerb.khim.zhur. no.2:105-110 '59. (MIRA 13:6)
(Thorium--Analysis) (Iodometry)

SHAKHTAKHTINSKIY, G.B.; ASLANOV, G.A.

Arsenate-iodometric method of determining magnesium **in the**
presence of iron and aluminum. Azerb. khim. zhur. no. 4:101-104
'59. (MIRA 14:9)

(Magnesium--Analysis)

SHAKHTAKHTINSKIY, G.B., doktor khimicheskikh nauk, prof.; ASLANOV, G.A.

Arsenate-iodometric determination of magnesium and calcium in case
of their simultaneous presence. Trudy Azerb. gos. zaoch. ped. inst.
6:83-92 '59. (MIRA 14:8)
(Calcium--Analysis) (Magnesium--Analysis)

SHAKHTAKHTINSKIY, G.; MUKIMOV, A.M.

Arsenate method for the iodometric determination of titanium in
titanium ores. Azerb.khim.zhur. no.1:61-64 '60. (MIRA 14:9)
(Titanium--Analysis)

SHAKHTAKHTINSKIY, G.B.; GUSEYN-ZADE, S.M.; BAGIROV, G.

Reduction of barite by natural petroleum gases. Azerb.khim.
zhur. no.2:135-139 '60. (MIRA 14:8)
(Barite) (Gas, Natural)

SHAKHTAKHTINSKIY, S.B.; ASLANOV, G.A.

Arsenate method of the iodometric determination of magnesium
and the permanganatometric determination of calcium in the
presence of iron, aluminum, and titanium. Azerb.khim.zhur.
no.3:133-138 '60. (MIRA 14:8)
(Magnesium--Analysis) (Calcium--Analysis)

S/081/62/000/004/025/087
B149/B101

AUTHORS: Mamedov, I. A., Shakhtakhtinskiy, G. B.

TITLE: Iodometric determination of thorium as thorium hydroarsenate

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 4, 1962, 141, abstract
4D99 (Azerb. khim. zh., no. 3, 1961, 99 - 103)

TEXT: A rapid method of determining thorium is proposed. It is based on the precipitation of thorium as $\text{Th}_2\text{H}(\text{AsO}_4)_3$, the precipitate being then dissolved in H_2SO_4 and the AsO_4^{3-} excess determined iodometrically. To 20 - 100 ml of hot acid solution containing Th, NH_4OH is added until the appearance of slight turbidity, then 3 - 5 ml of CH_3COOH are added and the mixture is heated to boiling. After this, a hot solution containing 10 - 15 ml of 0.5 N Na_3AsO_4 , acidified with CH_3COOH , is added, the mixture is heated 1 - 2 min and filtered through a filtration crucible No. 4. The precipitate is rinsed 6 - 7 times with hot water and dissolved in 30 ml

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Iodometric determination ...

S/081/62/000/004/025/087
B149/B101

H₂SO₄ (1:2.5). To the hot solution 20 - 25 ml of benzene, and 3 ml of 2 N KI are added, the mixture is shaken, the aqueous layer is diluted with an equal volume of water and the mixture is titrated until the organic layer is completely decolorized. SO₄²⁻ interferes with the complete precipitation of Th. In the determination of 0.8 - 125 mg the error is ≤0.04 mg. [Abstracter's note: Complete translation.]

Card 2/2

SHAKHTAKHTINSKIY, G.B.; MAMEDOV, I.A.

Study of conditions of reducing gypsum with natural oil gas.
Izv. vys. ucheb. zav.; neft' i gaz 3 no.1:121-124 '60. (MIRA 14:10)

1. Azerbaydzanskiy institut nefti khimii im. M. Azizbekova.
(Gypsum)

BAGBANLY, I.L.; SHAKHTAKHTINSKIY, G.B., red.; DZHAFAROVA, A., red. izd-
va; SAFAROV, F., tekhn. red.

[Use of ammonium tetrathiocyanodiammonochromite in the analytical
chemistry of rare and nonferrous metals] Primenenie tetraarodano-
diamminkhromiata v analiticheskoi khimii redkikh i tsvetnykh metal-
lov. Baku, Izd-vo Akad. nauk Azerbaidzhanskoi SSR, 1961. 213 p.
(MIRA 14:10)

(Metals—Analysis) (Reinecke acid)

SHAKHTAKHTINSKIY, G.B.; ASLANOV, G.A.

Comparative characteristics of the arsenate-iodometric
determination of magnesium. Azerb.khim.zhur. no.2:63-68 '61.
(MIRA 14:8)

(Magnesium--Analysis)

SHAKHTAKHTINSKIY, G.B.; ALIZADE, Z.I.

Iodometric determination of the total content of iron in iron
ores using iodine solvents. Azerb.khim.zhur. no.6:109-119
'61. (MIRA 15:5)

(Iron ores) (Iodometry)

SHAKHTAKHINSKIY, G.B.; VERDIZADE, A.A.

Characteristics of the microiodometric determination of iron
oxides using iodine solvents. Azerb.khim.zhur. no.6:89-97 59.
(MIRA 14:9)

(Iron---Analysis)

(Iron oxide)

SHAKHTAKHTINSKIY, G.B.; SHAKAROV, G.A.; ASLANOV, G.A.

More accurate quantitative analysis of gallium in alunites and
the determination of its extractability. Azerb. khim. zhur.
no.3:93-98 '62. (MIRA 16:12)

SHAKHTAKHTINSKIY, G.B.; ASLANOV, G.A.; SHAKAROV, G.A.

Arsenate method of the iodometric determination of gallium.
Dokl. AN Azerb. SSR 19 no.3:27-30 '63. (MIRA 17:8)

1. Institut khimii AN AzSSR. Predstavleno akademikom AN AzSSR
Z.I. Khalilovym.

SHAKHTAKHTINSKIY, G.B.; GUSEYNZADE, S.M.; KHALILOV, Kh.S.

Concentration of vanadium in alkaline solutions of the production of
aluminum oxide from alunite. Azerb.khim.zhur. no.4:109-113 '63.
(MIRA 17:2)

SHAKHTAKHTINSKIY, G.B.; DZHAFAROV, E.A.; SHAKAROV, G.A.

Selecting the method of extraction of gallium during the process
of a complex treatment of alunites. Dokl. AN Azerb. SSR 20 no.4:38-
43 '64. (MIRA 17:7)

1. Institut Khimii AzSSR. Predstavleno akademikom AN AzSSR M.F.
Nagiyevym.

L 33230-65 EWT(m)/EWP(t)/EWP(b) IJP(c) JD/JG

ACCESSION NR: AP5005520

S/0316/64/000/005/0097/0102

AUTHOR: Shakhtakhtinskiy, G.B.; Aslanov, G.A.; Veliyev, B.S.

TITLE: Study of conditions for the iodometric determination of yttrium through its arsenate ²⁷ ₁₃ _B

SOURCE: Azerbaydzhanskiy khimicheskiy zhurnal, no. 5, 1964, 97-102

TOPIC TAGS: yttrium determination, yttrium arsenate, iodometric analysis, yttrium precipitation, yttrium titration

ABSTRACT: Thermal conditions, the effect of the acidity of the medium, and the conditions of precipitation, washing, dissolving of the precipitate obtained and titration were studied for the optimal performance of the iodometric determination of yttrium arsenate. Both the test solution and precipitant were heated separately, neutralized, and treated with the respective acid; then the precipitant was added dropwise to the test solution. After a few minutes' heating the precipitate was filtered off for the determination of yttrium. For best results, hydrochloric or nitric acid should be used at 0.1 N, acetic acid at 0.2-0.3 N. Repeated washing of the precipitate with hot distilled water is recommended. The formula of the precipitate may be expressed as $YAsO_4$. Quantitative yttrium precipitation required a 5-10 fold excess of the precipitant sodium or

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L 33230-65

ACCESSION NR: AP5005520

ammonium arsenate. The precipitate should be dissolved in warm sulfuric acid (2:5), treated with benzene and a freshly prepared 2N solution of potassium iodide, then titrated with a solution of sodium thiosulfate. One ml of 0.1 N sodium thiosulfate solution corresponds to 0.004446 g yttrium. Comparative studies of the accuracy of this method revealed its high accuracy within a broad range of concentrations, and only 20-30 minutes were required for the test. Orig. art. has: 4 tables.

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: IC

NO REF SOV: 005

OTHER: 001

Card 2/2

SHAKHTAKHTINSKIY, G.B.; ALIZADE, Z.I.

Reduction of Dashkezan iron ore with mixtures of Karadag natural gas
or air. Azerb. khim. zhur. no.1:97-103 '65. (MIRA 13:7)

2. Institut khimii AN AzerSSR.

SHAKHTAKHTINSKIY, G.B.; GUSEYNZADE, S.M.; KHALILOV, Kh.S.; ASKEROV, G.R.

Production of pure vanadium pentoxide from flushing fluids of
alkali metal sulfates. Azerb. khim. zhur. no.3:140-173 '65.
(MIRA 19:1)

1. Institut khimii AN AzerSSR.

SHAKHTAKHTINSKIY, G.B.; AZIZOV, E.T.

Reduction of pyrite by Karadag natural gas. Azerb.khim.zhur.
no.4:87-91 '65. (MIRA 18:12)

1. Institut khimii AN AzSSR. Submitted September 10, 1964.

SHAKHTAKHTINSKIY, G.B.; GULIYEV, A.I.

Reduction of sulfur dioxide by means of reduced alunite as
a catalyst. Azerb. khim. zhur. no. 2:104-109 '65.

(MIRA 18:12)

1. Institut khimii AN AzerSSR. Submitted Sept. 10, 1964.

145723-66 EWT(E)/EXP(t)/ETI IJP(c) JD/JG
ACC NR: AP6026418 (A) SOURCE CODE: UR/0249/66/022/001/0012/0015

AUTHOR: Shakhtakhtinskiy, G. B.; Valiyev, B. S.; Aslanov, G. A.

ORG: Chemistry Institute (Institut khimii)

TITLE: Arsenate method of iodometric determination of yttrium in the presence of scandium

SOURCE: AN AzerbSSR. Doklady, v. 22, no. 1, 1966, 12-15

TOPIC TAGS: yttrium, scandium, arsenate, quantitative analysis

ABSTRACT: A new method has been developed for determining yttrium iodometrically as the arsenate in the presence of scandium (at least 0.3 mg of Y in the presence of up to 20 mg of Sc per 25 ml of solution). In order to precipitate the yttrium ion with arsenate ions, heating of the solution should be discontinued immediately after the appearance of turbidity, since further heating leads to the formation of an amorphous precipitate which contains scandium. If such a precipitate does form, 5 to 6 drops of 1 N HCl should be added; this dissolves the amorphous scandium precipitate, but the crystalline yttrium arsenate is not affected and deposits quantitatively. Yttrium as the arsenate is finally determined iodometrically. The analysis lasts about 40 to 50 min. The paper was presented by Academician AN AzerbSSR Nagiyev, M. F. Orig. art. has: 2 tables.

SUB CODE: 07/ SUBM DATE: 09Apr65/ ORIG REF: 005/ OTH REF: 002
Card 1/1 JLR

STAFITSEV, G.V.; KUPINOV, A.M.

Approximate method of the iodometric determination of titanium in the presence of cations of the hydrogen sulfide group. Azert.khim.izv. no. 2:59-63 '69. (MIRA 1969)

(Titanium--Analysis)

KULIYEV, A.A.; SHAKHTAKHTINSKIY, M.G.

Studying the pressure of saturated selenium vapor by the use of
radioactive tracers [in Azerbaijani with summary in Russian].
Dokl.AN Azerb.SSR 14 no.11:831-834 '58. (MIRA 11:12)
(Selenium) (Vapor pressure)

...-6-33/59

An Investigation of Saturated Selenium Vapor Pressure
Below the Melting Point

SOV/20-120-6-33/59

with those obtained by other authors. (Refs 3,4). The author expresses his gratitude to G.B.Abdullayev, Corresponding Member, Academy of Sciences, Azerb SSR, for suggesting the subject and for supervising the work. There are 2 figures and 5 references, 2 of which are Soviet.

ASSOCIATION: Institut fiziki i matematiki Akademii nauk Azerb SSR (Institute of Physics and Mathematics, AS Azerb SSR)

PRESENTED: March 1, 1958, by V.N.Kondrat'yev, Member, Academy of Sciences, USSR

SUBMITTED: February 28, 1958

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An Investigation of Saturated Selenium Vapor Pressure
Below the Melting Point

SOV/20-120-6-33/59

1. Selenium vapors--Pressure
pressure--Temperature factors
2. Vapor pressure--Measurement
3. Vapor

Card 3/3

5(4)
AUTHORS: Shakhtakhtinskiy, M. G., Kuliyeu, A. A. SOV/20-123-6-31/50

TITLE: An Investigation of the Pressure of Saturated Vapors of Some Compounds of Thallium (Issledovaniye uprugosti nasyshchennykh parov nekotorykh soyedineniy talliya)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol 123, Nr 6, pp 1071-1073 (USSR)

ABSTRACT: The present paper gives the results of the measurement of the pressure of saturated vapors of thallium sulfide and thallic oxide which can be used for the production of thallium-sulphur photoelements. Hitherto, no data have been available concerning the pressure of their saturated vapors and their thermodynamic functions. The authors determined the pressures of the saturated vapors according to Knudsen's method by means of an apparatus which is schematically shown in a figure. The carrying out of the experiment is discussed in short. For Tl_2S , the extrapolation of the found experimental dependence of lgP upon the reciprocal temperature up to 760 torr gives a boiling point which is by far lower than that of Tl_2O_3 . The boiling point of the sublimated substance was similar to that of Tl_2O . This fact proves the

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conversion of Tl_2O_3 into Tl_2O . A diagram shows the results of the measurements of the pressure of saturated Tl_2O vapors.

From the inclination of the curve the sublimation heat was calculated. The evaluation of the experimental data according to the method of the least squares gives $\lg P(\text{mm}) = 11.51 - (6612/T)$ where T denotes the absolute temperature. The above-mentioned diagram gives also the results of the measurements of the vapor pressure of Tl_2S . The pressures of the saturated vapors found from both of the components ly on the same straight line. This fact shows that Tl_2S is not decomposed during its evaporation. The temperature dependence of the pressure of saturated vapor $\lg P$ satisfies the equation $\lg P(\text{mm}) = 7.345 - 4484/T$. The sublimation energy was equal to 20.45 kcal/grad.mol. The sublimation heats of Tl_2S and of its individual components have very different values. This fact offers the possibility of

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purifying Tl_2S by vacuum sublimation. There are 2 figures
and 7 references, 6 of which are Soviet.

ASSOCIATION: Institut fiziki i matematiki Akademii nauk AzerbSSR
(Institute of Physics and Mathematics of the Academy of Sciences,
Azerbaydzhanskaya SSR)

PRESENTED: July 23, 1958, by V. N. Kondrat'yev, Academician

SUBMITTED: July 21, 1958

Card 3/3

KASHERININOV, G.O.; LEVINSKIY, M.I.; STANKEVICH, V.A.; KOVTUN, T.D.;
BELYAYEVA, I.I.; POPOV, Ye.I.; SMIRNOV, N.S.; SHAKHTAKHTINSKIY,
M.G.; KULIYEV, A.A.

Brief reports. Zav.lab. no.11:1403-1404 '59. (MIRA 13:4)

1. Institut Gipronikel' (for Kasherininov). 2. Institut goryu-
chikh iskopayemykh (for Belyayeva, Popov Smirnov). 3. Institut
fiziki i matematiki Akademii nauk Azerbaydzhanskoy SSR (for
Shakhtakhtinskiy, Kuliyeu).
(Chemical apparatus)

SHAKHTAKHTINSKIY, M.G.; KULIYEV, A.A.

Radioisotope study of pressures of saturated vapors of compounds
of the Tl-Se system. Dokl. AN Azerb. SSR 15 no.10:891-895 '59.
(MIRA 13:3)

1. Institut fiziki AN AzerSSR.
(Vapor pressure) (Thallium selenide)

[illegible]

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S/126/60/009/02/008/055

AUTHORS: Shakhtakhtinskiy, M.G. and E111/E555 Kuliyev, A.A.

TITLE: Investigation of the Saturated Vapour Tensions of
Thallium Selenides 1

PERIODICAL: Fizika metallov i metallovedeniye, 1960, Vol 9, Nr 2,
pp 202 - 204 (USSR)

ABSTRACT: The aim of the work was to measure the vapour tension of the compounds and to discover any possible dissociation in the solid phase by measuring the vapour pressure. 7 Vapour tension was measured by an effusion method using radioactive isotopes, on compounds prepared from 99.996% pure thallium and selenium. Measurements were made using both radioactive selenium and thallium separately. From the results of the experiment a graph of log. vapour tension against inverse temperature was drawn (Figure 1). Vapour-pressure measurements for TlSe and Tl₂Se gave the same result, whether Tl or Se was used as the tracer. It was concluded that no dissociation occurred in the solid state in these substances. A similar result was obtained for Tl₂Se₃ up to 400 °C. Above this temperature, the

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